

CLAIMS

[1] A method of manufacturing a cathode for a fuel cell equipped with a catalyst layer containing a catalyst,

the method including a potential providing step of providing a precursor layer containing the catalyst with a potential higher than 1.3 V with reference to a standard hydrogen electrode, so as to form the catalyst layer.

[2] A method of manufacturing a cathode for a fuel cell according to claim 1, wherein the precursor layer is provided with a potential of 1.6 V or less with reference to the standard hydrogen electrode in the potential providing step.

[3] A method of manufacturing a cathode for a fuel cell according to claim 1 or 2, wherein the precursor layer is provided with the potential by potential sweeping in the potential providing step.

[4] A method of manufacturing a cathode for a fuel cell according to one of claims 1 to 3, wherein the catalyst is a metal complex and/or a metal complex fired product formed by firing the metal complex.

[5] A method of manufacturing a cathode for a fuel cell according to claim 4, wherein the metal complex has a porphyrin ring or phthalocyanine ring.

[6] A method of manufacturing a cathode for a fuel cell according to claim 5, wherein the metal complex includes at least one species of metal selected from the group consisting of Co, Fe, Ni, Cu, Mn, V, and Ru as a center metal.

[7] A method of manufacturing a cathode for a fuel cell according to one of claims 1 to 6, including a precursor layer forming step of

forming the precursor layer by a coating method using a coating liquid made of the catalyst and a solvent adapted to dissolve or disperse the catalyst prior to the potential providing step.

5 [8] A method of manufacturing a fuel cell comprising an anode, a cathode, and a solid polymer electrolyte membrane arranged between the anode and cathode,

the method including an electrode forming step of forming the cathode by the method of manufacturing a cathode for a fuel cell according to one of claims 1 to 7.